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Operations S352 through S358 may be repeatedly performed until the user chooses another operating mode (S360).

In this manner, it is possible to display an operation control menu on the second display module 151b and execute the operation control menu according to whether the first display module 151a is bent or folded.

FIG. 7 illustrates a flowchart of a method of controlling a mobile terminal according to a third exemplary embodiment of the present invention. Referring to FIG. 7, the controller 180 may display a first operating-mode screen corresponding to an operating mode chosen by the user on the first display module 151a (S400).

The controller 180 may determine whether the first display module 151a is bent or folded (S402). If the first display module 151a is determined to be bent or folded, the controller 180 may display a second operating-mode screen on the second display module 151b. The second operating-mode screen may be a sub-menu screen of the first operating-mode screen or may be an operating-mode screen that can be displayed, replacing the first operating-mode screen.

If the first display module 151a returns to its original state (S406), the controller 180 may display the second operating-mode screen on the first display module 151a, and may display a third operating-mode screen related to the second operating-mode screen on the second display module 151b.

Operations S402 through S408 may be repeatedly performed until the user chooses another operating mode (S410).

In this manner, it is possible to quickly switch from one operating-mode screen to another operating-mode screen according to whether the first display module 151a is bent or folded.

FIG. 8 illustrates a flowchart of a method of controlling a mobile terminal according to a fourth exemplary embodiment of the present invention. In the fourth exemplary embodiment, the mobile terminal 100 may operate in an integrated-operating mode in which the first and second display modules 151a and 151b act as a single display.

Referring to FIG. 8, the controller 180 may display an operating-mode screen corresponding to a menu or operation chosen by the user and including an operation control menu on the first and second display modules 151a and 151b (S450).

Thereafter, the controller 180 may determine whether the first display module 151a is bent or folded (S452). If the first display module 151a is determined to be bent or folded, the controller 180 may control the operating-mode screen to be scrolled (S454).

More specifically, if a touch input and then a drag input are received through the second display module 151b, the controller 180 may scroll the operating-mode screen in a direction corresponding to the drag input.

If the operating-mode screen is scrolled to the extent that the operation control menu can be displayed on the second display module 151b and if one of a plurality of menu items of the operation control menu is chosen by being touched (S456), the controller 180 may control an operation corresponding to the chosen menu item to be performed (S458).

Operations S452 through S458 may be repeatedly performed until the user chooses another operating mode (S460).

In this manner, it is possible to easily move an operation control menu from the first display module 151a to the second display module 151b, which can receive a touch input, according to whether the first display module 151a is bent or folded and thus to efficiently choose one of a plurality of menu items of the operation control menu.

FIGS. 9 through 17 illustrate diagrams for explaining the methods of the first through fourth exemplary embodiments.

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More specifically, FIG. 9 illustrates a diagram for explaining a separate-operating mode in which the first and second display modules 151a and 151b are driven independently. Referring to FIG. 9, an operating-mode screen may be displayed on the first display module 151a, and an operation control menu 502 may be displayed on the second display module 151b. In this case, various operations may be performed according to whether the first display module 151a is bent or folded.

FIGS. 10 and 11 illustrate diagrams showing how to choose and execute one of a plurality of menu items of an operation control menu displayed on the second display module 151b. Referring to FIG. 10(a), when the upper left corner of the first display module 151 is folded forward, as indicated by reference numeral 511, a menu item 512 displayed on the far left side of the second display module 151b may be chosen. Thereafter, the menu item 512 may be readily executed. Alternatively, the user may choose whether to execute the menu item 512.

Likewise, referring to FIG. 10(b), when the upper right corner of the first display module 151a is folded forward, as indicated by reference numeral 513, a menu item 514 displayed on the far right side of the second display module 151b may be chosen. A menu item 516 displayed in the middle of the second display module 151b may be chosen when the top of the first display module 151a is folded forward or backward.

Referring to FIG. 11(a), when the upper left corner of the first display module 151a is folded forward, as indicated by reference numeral 531, one of a plurality of executable menu items set in advance to be chosen in response to a touch-and-drag input 540, i.e., a menu item 532, may be executed. Referring to FIG. 11(b), when the upper right corner of the first display module 151a is folded forward, as indicated by reference numeral 532, one of the executable menu items set in advance to be chosen in response to a touch-and-drag input 542, i.e., a menu item 536, may be executed. Alternatively, referring to FIG. 11(c), two or more menu items may be set to be chosen at the same time when the first display module 151a is bent or folded. For this, a message asking the user to choose one of the executable menu items to be executed may be displayed.

FIG. 12 illustrates diagrams showing how to display an operation control menu. Referring to FIG. 12(a), if the first display module 151a is folded, as indicated by reference numeral 551, when an operating-mode screen 550 is displayed on the first display module 151a, an operation control menu 561 including a plurality of executable menu items may be displayed on the second display module 151b. Referring to FIG. 12(b), if one of the executable menu items of the operation control menu 561, i.e., a menu item 560, is chosen in response to a touch input 561, an operation corresponding to the menu item 560 may be executed. As a result of the execution of the menu item 560, an operating-mode screen 565 may be displayed on the first display module 151a, as shown in FIG. 12(c).

FIG. 13 illustrates diagrams showing how to switch from one operating-mode screen to another operating-mode screen. Referring to FIG. 13(a), if the first display module 151a is folded when a first operating-mode screen 570 is displayed on the first display module 151a, a second operating-mode screen 575 may be displayed on the second display module 151b. Thereafter, referring to FIG. 13(b), if the first display module 151a is unfolded, the second operating-mode screen 575 may be displayed on the first display module 151a, and a third operating-mode screen 585 may be displayed on the second display module 151b.